

Vermont Mental Health Performance Indicator Project

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MEMORANDUM

TO: Vermont Mental Health Performance Indicator Project
Advisory Group and Interested Parties

FROM: John Pandiani and Koushik Ghosh

DATE: May 14, 2004

RE: Arrest Rates for CRT Survey Respondents and Non-Respondents

The Outcomes Work Group of the National Data Infrastructure Grant Project and the federal Center for Mental Health Services (CMHS) are engaged in an ongoing discussion of the best way(s) to measure criminal justice involvement for the Uniform Reporting System (URS) tables that are being required by the Substance Abuse and Mental Health Services Administration (SAMHSA). The methods for measuring levels of criminal justice involvement that are being considered include consumer surveys, cross-agency database analysis, and mental health MIS intake and discharge data items. This week's PIP is designed to contribute to that discussion by examining the effect of survey non-response on estimates of criminal justice involvement for adults served by a statewide system of care for adults with severe and persistent mental illness in Vermont during FY2001. The results of a similar analysis for recipients of children's mental health services were presented in the PIP Report dated September 5, 2003 (www.ddmhs.state.vt.us/docs/pips/2003/pip090503.pdf).

This PIP compares levels of criminal justice involvement (based on cross data set analysis) for adults with serious mental illness who responded to the Vermont 2001 consumer survey with levels of criminal justice involvement for members of this same population who had not responded to the consumer survey. (For a detailed description of the methodology and findings of this survey, visit www.ddmhs.state.vt.us/docs/res-eval/satisfaction-research/01CRTtechnicalreport.pdf). The rates of criminal justice involvement used in this analysis are arrest rates for service recipients during FY2001, the year in which the survey was conducted. Arrest rates were based on analysis of the Vermont Department of Public Safety's Incident Based Reporting System database in conjunction with the Vermont Division of Mental Health's Monthly Service Report database. Because the survey database and the arrest database do not share unique person identifiers, Probabilistic Population Estimation was used to determine the unduplicated number of individuals who were represented in both data sets. (For a detailed description of this statistical methodology visit <http://www.thebristolobservatory.com/PPE1.htm>)

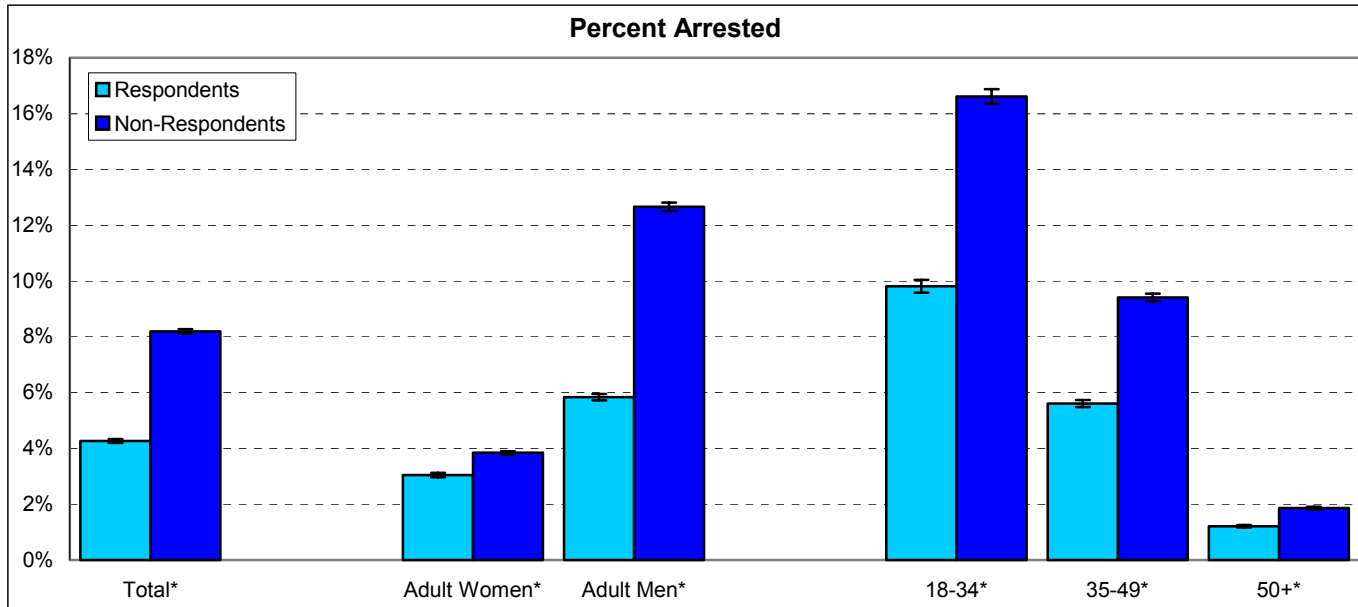
Results of this analysis indicate that survey non-respondents in every age and gender category were significantly more likely than survey respondents to have been arrested during the study period. Overall, survey non-respondents were almost twice as likely as respondent to be arrested (8.2% vs. 4.3%). Adult men who did not respond were more than twice as likely as

respondents to be arrested (12.7% vs. 5.8%). Adult women who did not respond were more than 25% more likely as respondents to be arrested (3.8% vs. 3.0%). Differences in arrest rates of respondents and non-respondents were highest for service recipients in the 18-34 and 35-49 age groups (+70%), but were also substantial for service recipients 50 years of age or older (+50%).

These findings indicate that a systematic bias in measures of criminal justice involvement is introduced by survey non-response. This bias would have a significant effect on apparent rates of criminal justice involvement for adults with serious mental illness who received community mental health services. Even if all respondents to the consumer survey had provided a complete and accurate report of criminal justice involvement during the study period, the overall rate of criminal justice involvement indicated by the survey would have been substantially lower than the rate for all individuals in the client population as a whole.

We look forward to your comments, questions, and suggestions for future analysis pip@ddmhs.state.vt.us or call 802-241-2638.

Arrest Rates For Consumer Survey Respondents and Non-Respondents Adults with Serious Mental Illness Vermont : FY 2001



	Survey Respondents			Survey Non-Respondents			Elevated Rate**
	Total Number	Number Arrested	% of Respondents	Total Number	Number Arrested	% of Non-Respondents	
Total*	936 ± 4	40 ± 0.6	4.3% ± 0.07%	1,903 ± 6.6	156 ± 1.4	8.2% ± 0.08%	1.9 ± <0.01
Adult Women*	525 ± 3	16 ± 0.4	3.0% ± 0.08%	963 ± 4.5	37 ± 0.6	3.8% ± 0.07%	1.3 ± <0.01
Adult Men*	411 ± 3	24 ± 0.4	5.8% ± 0.11%	940 ± 4.8	119 ± 1.3	12.7% ± 0.15%	2.2 ± <0.01
Age							
18-34*	132 ± 1	13 ± 0.3	9.8% ± 0.23%	409 ± 3.0	68 ± 1.0	16.6% ± 0.26%	1.7 ± <0.01
35-49*	392 ± 3	22 ± 0.5	5.6% ± 0.13%	797 ± 4.7	75 ± 1.0	9.4% ± 0.14%	1.7 ± <0.01
50+*	412 ± 3	5 ± 0.2	1.2% ± 0.05%	697 ± 3.5	13 ± 0.3	1.9% ± 0.05%	1.5 ± <0.01

Respondents include Community Rehabilitation and Treatment Program (CRT) clients who returned usable questionnaires. Non-respondents include CRT clients who did not return usable questionnaires. Arrests include all Vermont arrests during FY 2001.

* Indicates that there are statistically significant differences between respondents and non-respondents at a 0.05 level. Statistical significance at a 0.05 level is indicated when the confidence interval of either group does not overlap with the estimate of the other group.

** Elevated rate is defined as the arrest rate of non-respondents divided by the arrest rate for respondents. An elevated rate greater than 1 indicates that the arrest rate for non-respondents is greater than the arrest rate for respondents.

Because data sets used in this analysis do not share unique person identifiers, Probabilistic Population Estimation was used to determine caseload size and overlap (with 95% confidence intervals).